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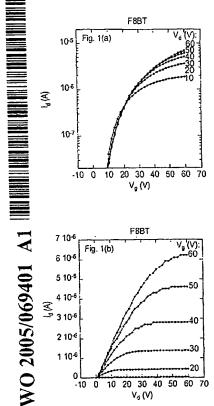
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(54) Title: N-CHANNEL TRANSISTOR



(57) Abstract: An n-channel or ambipolar field-effect transistor including an organic semiconductive layer having an electron affinity EA_{semicond}; and an organic gate dielectric layer forming an interface with the semiconductive layer; characterised in that the bulk concentration of trapping groups in the gate dielectric layer is less than 1018cm⁻³, where a trapping group is a group having (i) an electron affinity EA_{N} greater than or egual to EA_{semicond}and/or (ii) a reactive electron affinity EA_{rxn} greater than or egual to (EA semicond - 2eV).

F8BT 7 104 Fig. 1(b) 6 10-5 5 10⁻⁶ 4 10-2 10-€ 1 10-6 20 30 40 50 60 70 -10 10 V4 (V)

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